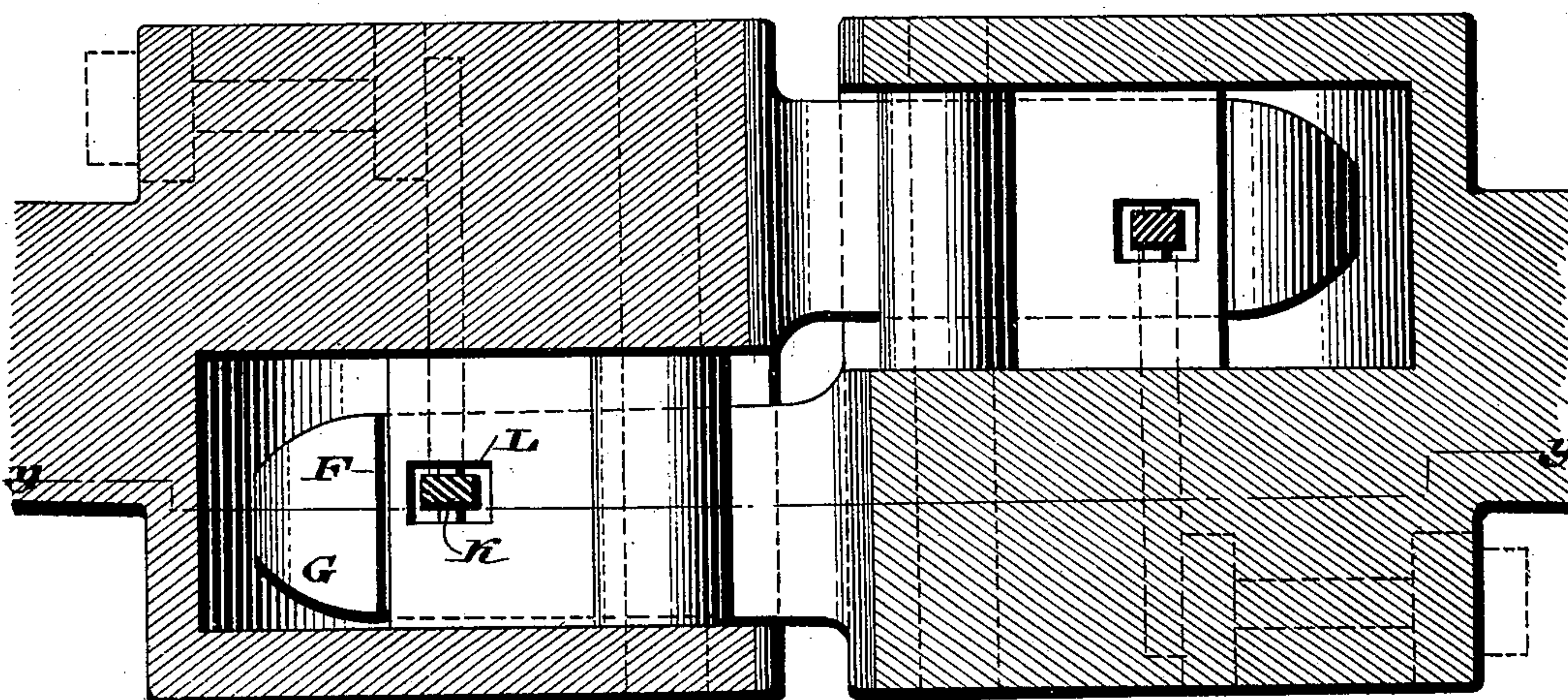
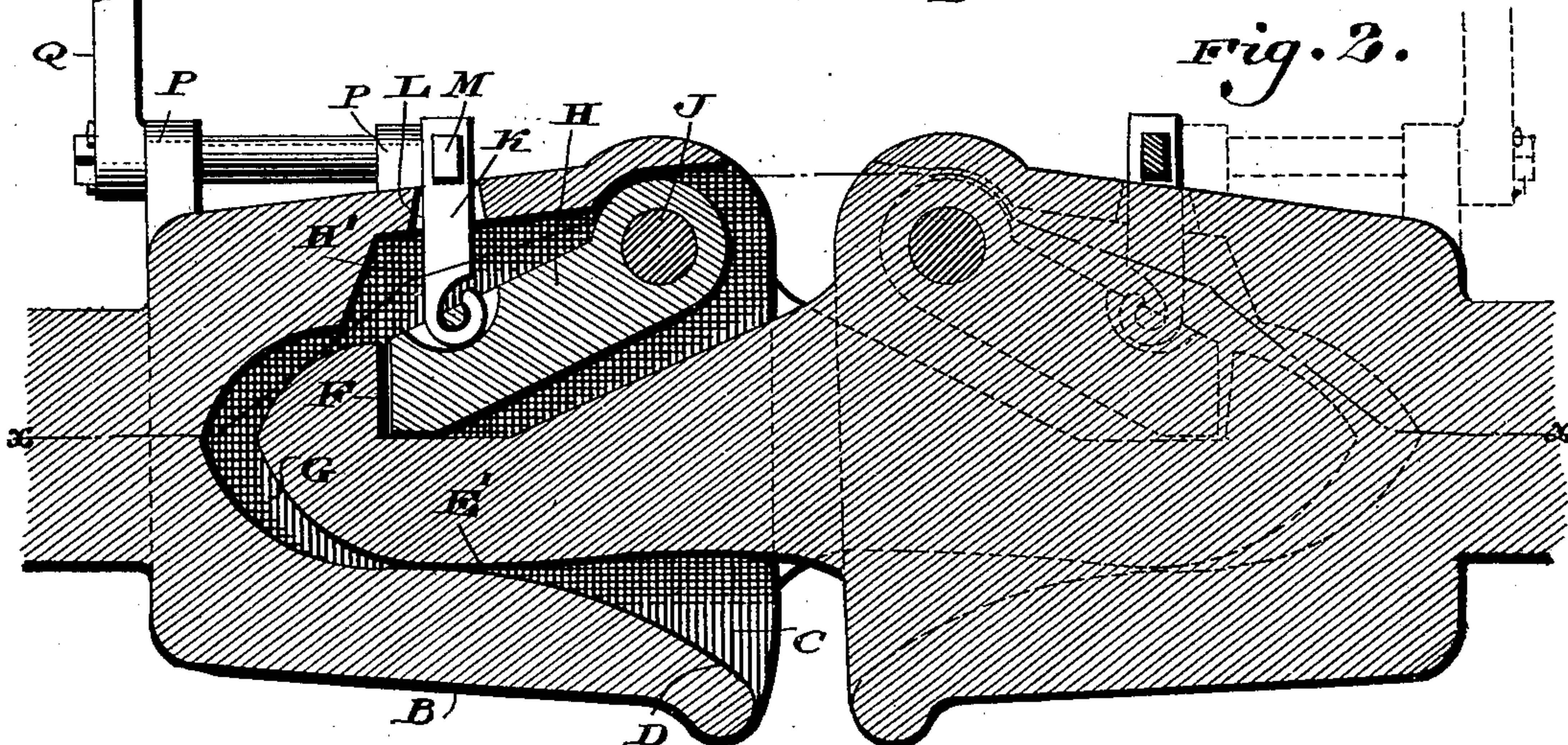
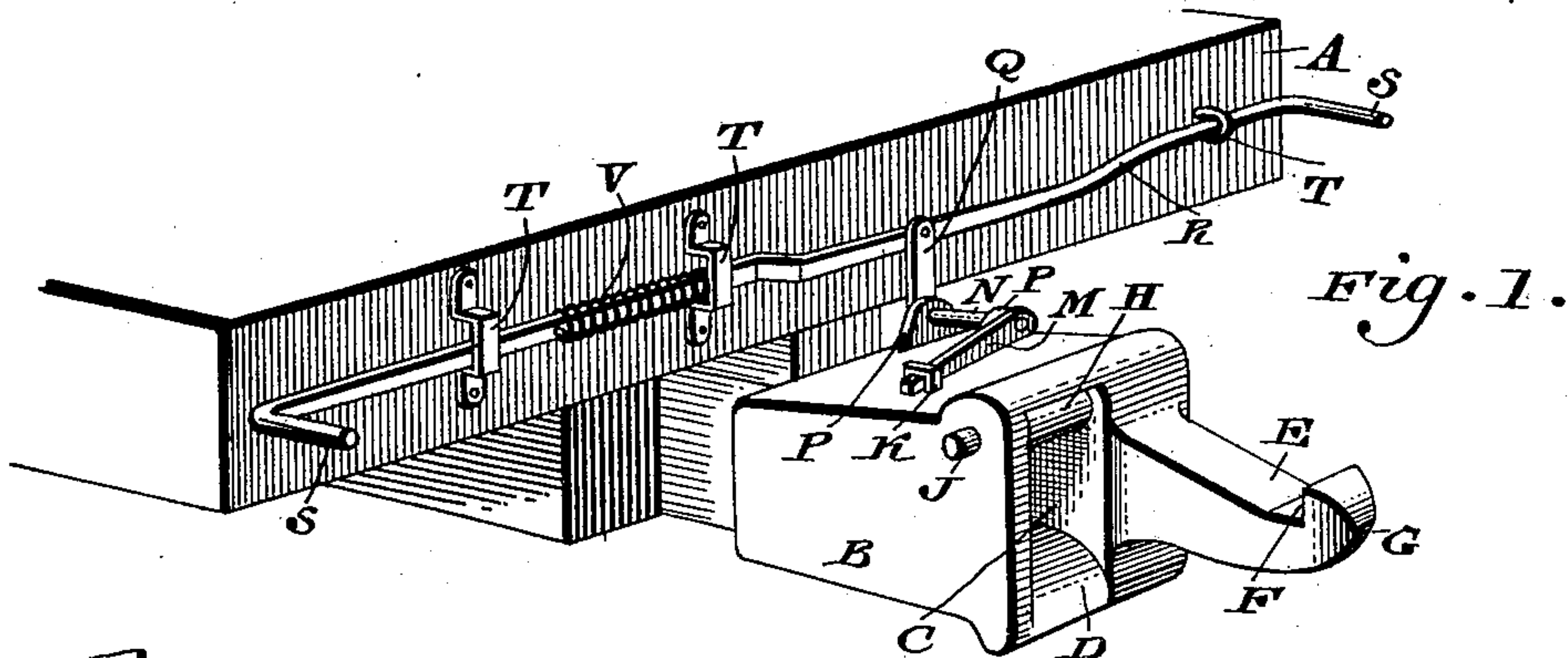


(No Model.)

G. W. PRESTON.
CAR COUPLING.

No. 599,987.

Patented Mar. 1, 1898.



WITNESSES

 B'

Fig. 3.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 599,987, dated March 1, 1898.

Application filed August 9, 1897. Serial No. 647,510. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WALTER PRESTON, a subject of the Queen of Great Britain, residing in the city and county of Camden, State of New Jersey, have invented a new and useful Improvement in Car-Couplings, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an improved construction of car-coupling by means of which cars can be coupled and uncoupled from the exterior, thereby lessening the liability of accident to the attendant or brakeman.

It further consists of novel details of construction, all as will be hereinafter fully set forth, and particularly pointed out in the claims.

Figure 1 represents a perspective view of one member of a car-coupling embodying my invention. Fig. 2 represents, on an enlarged scale, a longitudinal sectional view of two members of the coupling, showing the same in locked position, the section being taken on line *y y*, Fig. 3. Fig. 3 represents a horizontal sectional view on line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a car-platform, the same having attached thereto in any suitable manner the draw-head B, which latter is provided on one side thereof with a recess C, the lower wall D of which inclines downwardly, while the portion E' serves to support the hook E, which is integral with the draw-head and projects therefrom in longitudinal direction adjacent to the recess C, said hook having a shoulder F and a rounded or similarly-shaped nose G.

H designates a movable coupling-bar pivotally mounted upon the pin J, which is located in the upper portion of the recess C, said bar being engaged by the link K, which is attached to the arm M of the rock-shaft N, which latter is mounted in suitable bearings P on the draw-head B, it being noted that said recess has the cut-out portion H' for the reception of the coupling-bar H when the latter is lifted.

Q designates a rock-arm attached to the shaft N and pivotally secured to the rod R, which is provided with the handles S at its extremities, said handles being readily ac-

cessible from the exterior of the car and being guided in the straps or staples T, the proper position of said rod being always assured by means of the spring V, which has one end bearing against one of said staples, while its other end is secured to the rod R.

The foregoing description has been directed to the construction seen in Fig. 1 alone, it being of course understood that the other member of the coupling is made in substantially the same manner, except that the position of the hook E and recess C are reversed, as will be understood in Figs. 2 and 3.

The operation is as follows, the description being confined to the left-hand portion of the coupling seen in Fig. 2: The bar H normally hangs in a substantially vertical plane, and when the hook E enters the recess C its nose will strike the lower wall D thereof and then raise the coupling-bar H until the parts assume the position seen in Fig. 2, after which the bar H drops and is engaged by the shoulder F of the hook E, the above operation being simultaneous with both members of the coupling, the hook E normally resting on the portion E' of its adjacent draw-head. When it is desired to uncouple or disconnect the cars, it is only necessary to actuate in the proper direction the rod R, whereupon the shaft N will be rocked and the arm M raised, thereby lifting the coupling-bar through the medium of the intermediate connections, said bar being received in the recess H', in which position it clears the shoulder F and the cars are uncoupled.

It will of course be evident that while I have shown the construction seen in Fig. 1 as especially applicable to freight-cars the same can be equally well employed in connection with passenger-cars, the arm or connection Q being extended upwardly, so as to be readily manipulated by any one standing upon the platform A. It will further be apparent that changes may be made by those skilled in the art which will come within the scope of my invention, and I do not, therefore, desire to be limited in every instance to the exact construction I have herein shown and described.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupling, a draw-head having a recess, a coupling-bar therein, a hook adapted to enter said recess and be engaged by said bar, an oscillating shaft with link connected
5 to said bar, a sliding rod pivotally connected with an arm on said shaft, and a spring controlling said rod.

2. A car-coupling, having one member consisting of the draw-head B provided with a
10 recess C having an inclined wall D therein, a portion E' adapted to support the opposite coupling member, a coupling-bar H pivotally mounted in said recess, the latter having the cut-out portion H' for the reception of said
15 bar when the latter is elevated, a rock-shaft mounted on said draw-bar, a link attached to said bar, and an arm common to said rock-

shaft and link, another arm engaging a rod having handles on its ends and a spring for holding said rod in position. 20

3. A car-coupling consisting of two draw-heads each having a projecting hook, and a recess with an inclined lower wall, a coupling-bar pivoted in said recess and engaging said hook, a rock-shaft mounted on each of
25 said draw-heads and having a link connection with said coupling-bar, a sliding bar having an arm on said shaft pivoted thereto, and a spring keeping said bar in normal position.

GEORGE W. PRESTON.

Witnesses:

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